

CHAPTER 6. MANAGEMENT OF HUMAN ACTIVITIES

6.1 Education, Awareness, and Public Outreach

Conservation awareness is instrumental in conducting natural resources management. USARAK's approach to awareness stresses education. It provides military personnel and the public with insights into Fort Richardson's natural environment and conservation challenges. The more people know about the installation's unique natural resources, the more responsibly they will act toward them.

Education also promotes awareness of critical environmental projects and the rationale behind them. Activities such as fish stocking, erosion control, wildfire suppression, etc. can be accomplished with little conservation awareness effort since soldiers, recreationists, and the general public naturally support these easily understood efforts. However, issues such as trespass structures, restrictions on troop operations, nongame management, bear baiting, pesticide use, etc. require effective conservation communication to obtain positive support and, perhaps more importantly, to avoid adverse



Fort Richardson offers wonderful opportunities to see and experience wildlife.

reactions. A conservation awareness program must be directed to both installation and external interests if it is to be effective.

6.1.1 Education, Awareness, and Public Outreach Goals

Education, awareness, and public outreach goals all contribute to one or more of the overall natural resources program goals of stewardship, military training support, compliance, quality of life, and integration. The goals for education, awareness, and public outreach at Fort Richardson are:

- Involve the surrounding community in Fort Richardson's natural resources program.
- Provide an understanding of the Fort Richardson natural resources program through communication to installation and surrounding communities.
- Provide general conservation education to the Fort Richardson community.
- Increase understanding of natural resource conservation to youth groups.
- Enhance professional skills of the USARAK natural resources staff.
- Interact with other organizations, agencies, and personnel inside and outside of DOD.
- Use the media to educate the Fort Richardson community regarding uses of natural resources for quality of life enhancement.
- Provide hunters, trappers, and anglers with information needed to enjoy their sports within regulations.

- Provide hunters, trappers, and anglers with information needed to understand their role in natural resources conservation.
- Increase public awareness of natural and cultural resources management on the installation.
- Educate soldiers, the military community and the public to minimize damage from use of military lands.
- Increase public awareness of recreational opportunities.
- Provide decision-makers with information needed to make sound judgments on issues affecting the Fort Richardson natural resources program.

6.1.2 Education, Awareness, and Public Outreach Management Plan

Education, awareness, and public outreach program management and planning includes all the planning, budgeting, contract oversight, and organization necessary to implement the education awareness and public outreach program. The primary emphasis for this component of the education, awareness, and public outreach program is the preparation of the education, awareness, and public outreach management action plan every five years, with annual updates.

Description and Justification: Prepare, update, and implement an education, awareness, and public outreach management action plan for Fort Richardson. The education, awareness, and public outreach management action plan identifies, delineates, and proposes measures to implement public involvement activities on Fort Richardson. Completing and updating the education, awareness, and public outreach management plan is required by Public Law 106-65 (Military Land Withdrawal Act) as mitigation for the land withdrawal LEIS and Public Law 86-797 (Sikes Act) every five years to implement the INRMP. Per Memorandum DAIM-ED-N, 21 March 1997, this component of the INRMP is a class 1 requirement.



Scouts are among the youth groups that participate in Fort Richardson natural resource activities.

Measures of Effectiveness:

- Complete, maintain, and update an education, awareness, and public outreach management action plan for Fort Richardson.
- Provide education opportunities to the military and public.

Management History: An education, awareness, and public outreach management action plan has not been prepared for Fort Richardson. Education, awareness, and public outreach actions have been performed through other components of USARAK's natural resource programs.

Current Management: An education, awareness, and public outreach management action plan has not been prepared. If this INRMP is not approved and funded, no education, awareness, and public outreach management action plan will be prepared, updated, or implemented.

Proposed Management: Prepare and update the education, awareness, and public outreach management action plan as outlined in Table 6-1.

Other Management Alternatives Considered and Eliminated: There are no alternatives to maintaining a current education, awareness, and public outreach management action plan with updates at least every five years. NEPA documentation is also legally mandated.

Table 6-1. Education, Awareness, and Public Outreach Management Action Plan.

OBJECTIVE	RESPONSIBLE FOR IMPLEMENTATION	PRIORITY	IMPLEMENTATION				
			2002	2003	2004	2005	2006
Prepare an education, awareness, and public outreach management action plan with annual updates.	USARAK Conservation	High	x	x	x	x	x
Update the education, awareness, and public outreach management action plan for the planning period of 2007-2011.	USARAK Conservation	High					x
Complete NEPA documentation for update.	USARAK Conservation	High					x

6.1.3 Education, Awareness, and Public Outreach Survey

This component of the education, awareness, and public outreach program gathers data about the needs and desires of the Fort Richardson community concerning natural resources management. Surveys are the primary tool for collecting information from Fort Richardson users, surrounding community members and land owners, and federal and state agencies with responsibilities for management of Fort Richardson.

6.1.4 Education, Awareness, and Public Outreach Management

Description and Justification: Conduct natural and cultural resources education and awareness about Fort Richardson. The project will develop informational materials, conduct briefings, attend public meetings and events, and conduct surveys of public desires for natural and cultural resources management on Fort Richardson that will improve public awareness about the diverse and unique natural and cultural resources that are found at Fort Richardson. Conducting education, awareness, and public outreach is required by Public Law 86-797 (Sikes Act) to implement the INRMP.

Measures of Effectiveness:

- Brief natural resources programs in at least one RAB meeting per post per year.
- Improve public relations through public outreach, education and awareness.
- Create at least four natural resources television events per year, with topics chosen by Natural Resources Branch and Public Affairs Office.

- Communicate success at sustaining mission activities while preserving Army land.
- Educate land users of their environmental stewardship responsibilities.
- Ensure appropriate command group, mission, and tenant personnel, including environmental compliance officers, receive appropriate natural resources awareness training.

Management History: USARAK has been involved in public outreach at Fort Richardson for a long time. Hunting, trapping, and fishing awareness occurs every year.

Current Management: There are four components of the education, awareness, and public outreach management program:

Public Outreach and Awareness is focused on making the surrounding community aware of natural resource opportunities and programs on Fort Richardson. Tools to accomplish this project include the natural resources web page, the natural resources newsletter, public meetings, brochures and pamphlets, videos, posters and educational panels at the watchable wildlife viewing platforms and other recreation sites.

The second component of the education, awareness, and public outreach program is *Recreational User Education*. The purpose of this component is to educate those who will hunt, fish, trap, or engage in other recreational activities on Fort Richardson. Many nonresident military (those who have lived in Alaska for less than a year) hunters, anglers, and trappers need education on hunting bears and moose, caring for meat, four-wheel drive operation, outdoor survival, ethics, etc. Some topics are common to the nation as a whole, but many are

specific to the harsh conditions and opportunities of interior Alaska.

USARAK personnel are committed to cultivating a conservation ethic in local youth. *Youth education* provides conservation education opportunities to young individuals and youth groups in the Fort Richardson area. Long-term changes in conservation attitudes and knowledge are important aspects to an effective conservation awareness and education program. Such long-term changes are easiest achieved by working with youth; particularly youth groups that are already involved in conservation. USARAK personnel work with youth groups on conservation programs and, on occasion, give talks to youth groups. Boy Scouts, in particular, need support with projects, merit badges, and conservation talks.

Professional Communications and Training entails communication and interaction with other professionals in agencies and organizations inside and outside of DOD. Natural resources training will enhance the skills of USARAK's natural resources personnel. Additionally, information on natural resources projects occurring on Fort Richardson will be accessible to other professionals in similar positions. DOD and Army breakout sessions are held at annual meetings of the Society of American Foresters, National Military Fish and Wildlife Association, ITAM Workshop, and Society of Agronomy. These are among the professional societies which meet the professional development needs of USARAK's natural resources managers. Membership in these societies is encouraged. They publish some of the best scientific journals in their professions, and current literature review is a necessary commitment to maintain professional standards. Attending meetings for these societies provides excellent opportunities to communicate with fellow professionals.

Proposed Management: Conduct education, awareness, and public outreach management as outlined in Table 6-2.

Other Management Alternatives Considered and Eliminated: There are other potential methods for conducting education, awareness, and public outreach management. No other options, however, would meet the needs of the military mission. The

proposed management actions listed above carefully balance the needs of the military mission, recreation, and the ecosystem. Other actions would be too minimal or would be cost prohibitive.

6.1.5 Education and Public Outreach Responsibilities

DPW holds the responsibility for conducting the education, awareness, and public outreach program. Public Affairs Office is primarily responsible for interacting with the professional news media. All materials developed by the DPW Natural Resources Branch are required to be reviewed by Public Affairs before they are released in any form to the public.

6.2 Outdoor Recreation

According to the *Statewide Comprehensive Outdoor Recreation Plan*, outdoor recreation is the second highest reason why people live in Alaska, and 71% of Alaskans believe that good hunting and fishing are important.

USARAK strives to maintain an interactive relationship with local communities by providing many recreational opportunities to the public. Fort Richardson is a large, relatively undeveloped open space. This open space and the outdoor recreation opportunities associated with it are perhaps Fort Richardson's best attributes in terms of community quality of life. With ever-increasing time to pursue recreational interests, the general public will undoubtedly place more demand on Fort Richardson's natural resources.

6.2.1 Outdoor Recreation Program Goals

Outdoor recreation goals all contribute to one or more of the overall natural resources program goals of stewardship, military training support, compliance, quality of life, and integration. Goals for the outdoor recreation program are:

- Manage outdoor recreation consistent with needs of the Fort Richardson military mission.
- Involve the surrounding community in Fort Richardson's natural resources program.

Table 6-2. Education, Awareness, and Public Outreach Management.

OBJECTIVE	RESPONSIBLE FOR IMPLEMENTATION	PRIORITY	IMPLEMENTATION				
			2002	2003	2004	2005	2006
Install interpretive panels on watchable wildlife viewing platforms in 2002.	USARAK Natural Resources	Medium	x				
Conduct hunting, trapping, and fishing awareness.	USARAK Natural Resources	Medium	x	x	x	x	x
Develop an informational sheet about fishing opportunities at Fort Richardson.	USARAK Natural Resources	Medium	x				
Create hunting, trapping, and fishing brochure.	USARAK Natural Resources	Medium	x				
Create educational video about natural resources management.	USARAK Natural Resources	Medium				x	
Attend natural resources training.	USARAK Natural Resources	Medium	x	x	x	x	x
Attend DOD natural resources meetings and conferences.	USARAK Natural Resources	Medium	x	x	x	x	x
Develop a public and military information and education program for wildland fire awareness, fire prevention, information on active fires on Fort Richardson, and informational meetings on prescribed fires.	USARAK Natural Resources	Medium	x	x			
Develop and construct signs at priority lakes explaining the importance of lakeshore habitat and ways users can help protect this habitat.	USARAK Natural Resources	Medium			x		
Protect loon nesting habitat by annually posting loon alert signs at public access points on Clunie and Otter lakes.	USARAK Natural Resources	Medium	x	x	x	x	x

- Manage outdoor recreation while maintaining ecosystem integrity.
- Control the use of off-road vehicles to minimize damage to ecosystems.
- Provide high quality opportunities to the Fort Richardson community and the general public for hunting, trapping, and fishing within biological and recreational carrying capacities of the resources.
- Provide high quality natural resources-based opportunities for other outdoor recreation, such as hiking, skiing, snowmachining, rafting, bird watching, etc.

6.2.2 Outdoor Recreation Program Management Plan

Outdoor recreation program management and planning includes all the planning, budgeting, contract

oversight, and organization necessary to implement the outdoor recreation management program. The primary emphasis for this component of the outdoor recreation management program is to prepare and update the outdoor recreation management action plan.

Description and Justification: Prepare, update, and implement an outdoor recreation management action plan for Fort Richardson. Military and public demand for outdoor recreation on Army posts in Alaska is high. Updates of the outdoor recreation management plan are required by Public Law 106-65 (Military Land Withdrawal Act) as mitigation for the land withdrawal LEIS and Public Law 86-797 (Sikes Act) every five years to implement the INRMP. Per Memorandum DAIM-ED-N, 21 March 1997, this component of the INRMP is a class 1 requirement.

Measures of Effectiveness:

- Complete, maintain, and update the outdoor recreation management plan.
- Maintain and enhance recreational opportunities through outdoor recreation management planning.
- Involve resource agencies in the planning process for outdoor recreation management and the public in review of the plan.

Management History: The 172nd Brigade Regulation 28-2, 5 February 1982, *Fort Richardson Outdoor Recreational Plan*, was the first outdoor recreation plan implemented at Fort Richardson. The next update of the outdoor recreation management action plan for Fort Richardson was completed in 2001.

Current Management: Current management actions to update the outdoor recreation management action plan will cease in 2002. If this INRMP is not approved and funded, no new outdoor recreation management action plan will be prepared, updated, or implemented. Policies already in place in the current outdoor recreation management action plan will continue.

Proposed Management: Prepare and update the outdoor recreation management action plan as outlined in Table 6-3.

Other Management Alternatives Considered and Eliminated: There are no alternatives to maintaining a current outdoor recreation management action plan with updates at least every five years. NEPA documentation is also legally mandated.

6.2.3 Outdoor Recreation Monitoring

Description and Justification: Monitor recreational use on Fort Richardson to determine impacts on the ecosystem. Monitoring includes field surveys, aerial surveys, and user surveys to determine location, type, duration and frequency of use. Monitor training areas to locate trespass structures. Recreational use of military land in Alaska creates impacts on military training lands, primarily a result of legal recreational use and illegal trespass of recreational vehicles. A basic tenet of ecosystem management is the importance of human values and use. Fort Richardson's outdoor recreation program affects ecosystems in terms of both products (fish and game species, firewood, etc.) and disturbance associated with recreationists. USARAK is well aware of the overriding need to ensure these activities do not significantly impact ecosystem integrity. Conducting outdoor recreation monitoring is required by Public Law 86-797 (Sikes Act) to implement the INRMP.

Measures of Effectiveness:

- Monitor the extent and condition of ORV trails.
- Monitor erosion and damage to streambanks and lakeshores.
- Gather fishing use and harvest data opportunistically to determine high use areas and fishing pressure.
- Collect and summarize harvest information from the hunting, trapping, and fishing (HFT) registrants.

Table 6-3. Outdoor Recreation Management Action Plan.

OBJECTIVE	RESPONSIBLE FOR IMPLEMENTATION	PRIORITY	IMPLEMENTATION				
			2002	2003	2004	2005	2006
Prepare annual updates of the outdoor recreation management action plan.	USARAK Natural Resources	High	x	x	x	x	x
Prepare and update the outdoor recreation management action plan for the planning period of 2007-2011.	USARAK Natural Resources	High					x
Complete NEPA documentation for update.	USARAK Natural Resources	High					x

- Collect and compile annual trapper and black bear baiting harvest reports.

Management Areas: All of Fort Richardson training areas are monitored for impacts from recreational use. Specific recreational facilities to be monitored on a regular basis are Otter Lake Recreation Area, Gwen Lake, Clunie Lake, and the Snowhawk Valley cabins.

Management History: Outdoor recreation monitoring has taken place for a long time at Fort Richardson. While doing other duties, the natural resources staff has always checked on recreational facilities and activities to assess disturbance. The fish and game wardens have also played this role.

Current Management: There are a number of elements of the outdoor recreation monitoring program. Recreational facility inventory, recreational user monitoring, and recreational impact monitoring are components of the outdoor recreation monitoring and inventory program.

Recreational Facility Inventory: A baseline recreational facility inventory delineates and maps recreational trails, campgrounds, cabins, boat ramps, pull-outs, lakes and rivers. Documentation includes written paragraphs describing recreational activities associated with various trails and trail networks. Trail maps are developed from digital orthophotos and ground-truthed by four-wheel-drive truck, ATV or snowmachine. Written descriptions are created from direct observation, institutional knowledge and additional field notes.

Recreational User Monitoring: Recreational user monitoring includes monitoring users during hunting, fishing, and trapping seasons, recording and maintaining a database of users through the HTF process, and conducting recreational user surveys. Aerial surveys are conducted to observe hunting and fishing on remote areas of Fort Richardson. Hunting, trapping, and fishing permits are required for recreational use on Fort Richardson. The HTF database is a useful tool to measure the amount of recreational use on Fort Richardson. The HTF call-in, call-out system records user days and location of use on the installation.

Recreational Impact Monitoring: Aerial and on-the-ground monitoring is conducted to assess the impacts from recreational use on the environment. Recreational use impacts usually result from ORV use, but can also result from foot use along stream and lake banks. Impacts are identified, delineated, mapped and prioritized for repair. Additional recreational use monitoring concentrates on assessing use in critical areas. Special consideration is given to protection of these critical areas (nesting sites, highly erodible areas, etc.) from negative impacts due to outdoor recreation. In addition, USARAK uses aerial photographs or other imagery to monitor long-term changes and effects of recreational use of remote areas.

Proposed Management: Conduct outdoor recreation monitoring as outlined in Table 6-4.

Other Management Alternatives Considered and Eliminated: There are other potential methods of

Table 6-4. Outdoor Recreation Monitoring.

OBJECTIVE	RESPONSIBLE FOR IMPLEMENTATION	PRIORITY	IMPLEMENTATION				
			2002	2003	2004	2005	2006
Identify, delineate, and map impacts from recreational use.	USARAK Natural Resources	Medium	x	x	x	x	x
Inventory and map recreational winter trails on Fort Richardson.	USARAK Natural Resources	Medium	x				
Develop recreational trail map for Fort Richardson.	USARAK Natural Resources	Medium		x			
Report annually on the number of recreational users on Fort Richardson.	USARAK Natural Resources	Medium	x	x	x	x	x
Maintain HTF database.	USARAK Natural Resources	Medium	x	x	x	x	x
Develop and conduct surveys of recreational users to determine their needs.	USARAK Natural Resources	Medium	x	x	x	x	x

conducting outdoor recreation monitoring. Proposed methods for conducting outdoor recreation monitoring, however, were developed specifically for Fort Richardson.

6.2.4 Outdoor Recreation Management

Description and Justification: Manage recreational use on Fort Richardson to include hunting, trapping, and fishing management, off-road vehicle management, trespass structure abatement and management of other recreational activities. Actions include installing barricades and fencing to control illegal trespass, designating areas for legal use, developing and installing signs, improving access for rafting opportunities, and improving access for hunting opportunities. Recreational use, both legal and illegal, impacts the ecosystem and military training lands. If recreational use is not managed, conflicts will continue to occur and recreational use may be limited by the Command. Conducting outdoor recreation management is required by Public Law 86-797 (Sikes Act) to implement the INRMP.



Fort Richardson hosts one of the most popular moose hunts in the state.

Measures of Effectiveness:

- Increase access opportunities for recreational activities to the extent possible within the framework of the military mission and the capability of the environment to sustain increased use.
- Provide excellent recreational opportunities for the military community and the general public.
- Increase watchable wildlife opportunities.
- Allow a minimum of 600 user days per year
- Update requirements and restrictions to hunting, trapping and fishing and publish in the HTF regulation supplement annually.
- Maintain access to existing stocked lakes and popular fishing spots along streams and rivers.
- Enhance existing fishing areas with parking areas, docks, boardwalks, interpretive signs or other improvements.
- Work with ADF&G to ensure a sustainable population of game and fish species.
- Provide for sustainable harvest of furbearers on Fort Richardson.

Recreational Use Management Areas: Fort Richardson is managed for a number of different types of public recreational use. All areas that are determined open for recreational use may be closed temporarily during periods of military use.

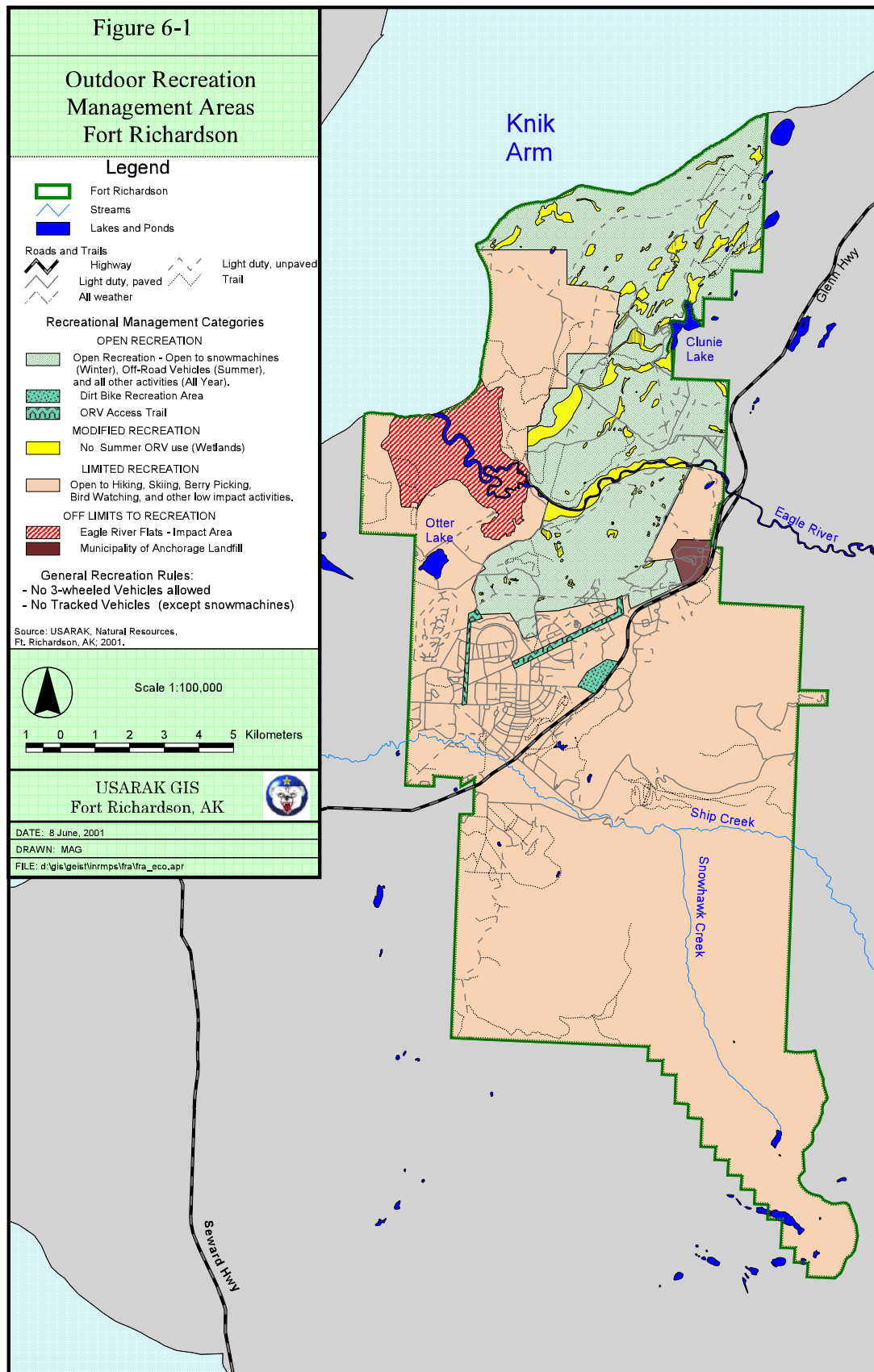
Open Use Areas: Open to all types of recreation, including ORVs, during all seasons.

Modified Use Areas: Open to hunting, fishing, trapping, hiking, skiing, and berry picking, but are not open to any type of ORV, except in the winter.

Limited Use Areas: Restricted to all types of recreational use year-round except hiking, skiing, bird watching and berry picking.

Off-Limits Areas: Restricted to public access and use year-round (see Figure 6-1).

Figure 6-1. Outdoor Recreation Management Areas.





Fort Richardson provides good fishing opportunities close to Anchorage.

Management History: Although moose hunting occurred on Fort Richardson prior to 1965, no information is available as records were not maintained. From 1965 to 1974, several moose hunts were organized and carried out by ADF&G and Fort Richardson biologists. From 1975 through 1981, no moose hunting occurred on Fort Richardson. From 1982 to 1986, moose hunts on Fort Richardson were guided due to the safety hazards of using big game rifles close to the Glenn Highway and near residential areas in east Anchorage. The ADF&G and the Army provided the guides necessary to conduct the hunt. Even with guided hunting, safety was becoming a serious issue of concern. In addition, the guided hunts required significant amounts of manpower and logistical support, which were not only an unnecessary burden to the Army and ADF&G, but also interfered with the training mission. As a result, in 1987, the Fort Richardson moose hunt was converted to archery only. Two years later, in 1989, a black powder (rifle) hunt was added in a designated area of Fort Richardson north of Eagle River.

Current Management: There are a number of components of the outdoor recreation program at Fort Richardson. Both hunting and fishing are important natural resources-based forms of outdoor recreation. In addition to hunting and fishing, Fort Richardson has a plethora of natural resources-related recreational activities. They range from more passive activities, such as watching wildlife and picnicking, to very active recreational outlets such as hiking, rafting, camping, skiing, and off-road vehicle (ORV) riding.

Hunting, Trapping and Fishing: Fishing is an important natural resources-based form of outdoor recreation at Fort Richardson. The popularity of the sport can be attributed to both sound management and efficient administrative procedures that allow easy access for anglers. Hunting also is an important natural resource-based outdoor recreational pursuit for many on the post.

Fishing at Fort Richardson is centered primarily around the five main lakes that are stocked with fish. Fishing in streams and rivers also is important, although there are seasonal highs in the amount of use. The majority of hunters that use Fort Richardson are in pursuit of moose; fewer hunters pursue small game.

Data on the number and type of permits issued is kept by the MP game wardens. To date, this data has not been tabulated. In general, the number of permits issued in the past few years has increased. In 1994, 565 hunting and fishing permits were issued.

Before hunting on Fort Richardson, individuals are required to present to the main gate a valid State of Alaska hunting license, state permit or harvest ticket (if appropriate), and a Fort Richardson hunting/fishing permit. Persons can sign for any two hunting areas open for that day. The Fort Richardson permit is obtained by attending a Safety Orientation Briefing. Individuals not stationed or employed on Fort Richardson or Elmendorf AFB who wish to fish on the post are required to obtain a visitor's pass at the main gate. Fort Richardson hunting and fishing regulations are found in USARAK Regulation 190-13, *Enforcement of Hunting, Trapping and Fishing on Army Lands in Alaska*.

The Fort Richardson moose hunting season begins the day after Labor Day in early September and terminates on November 15. Both bow and black powder hunting are allowed during the early hunt which takes place before, during, and after the breeding season (rut). The late hunt (December 15 to January 15) is for bow hunters only. Annual harvest levels and sex ratios will be cooperatively determined by USARAK and ADF&G. The bag limit for these hunts is one moose.

Muzzle-loading rifle moose season was initiated on the post in 1989. Designated areas open for this hunt are north of Eagle River. As with archery hunts, muzzle-loader hunts are by special permit only. An average of 25 permits are issued each year. Season dates are from the day after Labor Day through November 15, with a bag limit of one moose of designated sex. The muzzle-loading rifle season will likely remain unchanged over the next five years.

Due to its close proximity to Anchorage and its high hunter success rate, the Fort Richardson moose hunt has become the most popular hunt in the state. This has resulted in ever increasing demands and competition for hunting permits.

With the exception of major habitat changes and severe weather conditions, archery and black powder hunting present the most significant impact on the post moose herd. The majority of moose hunting is archery and will continue to be so during 2002-2006.

An average of about 250 spruce grouse are harvested on Fort Richardson each year, with most being killed soon after the opening of the season. Season dates are identified in the current ADF&G hunting regulation booklet. The bag limit is five per day. Harvest levels for grouse are not expected to change over the next five years.

Snowshoe hare harvest is very small, with an average of about 100 per year. Snowshoe hare season is identified in the current ADF&G hunting regulation booklet. The daily bag limit is five. Harvest levels for snowshoe hare are not expected to change over the next five years. Ptarmigan harvest is insignificant with an average of about 50 per year. Ptarmigan season is identified in the current ADF&G hunting regulation booklet. A daily bag limit is 10. Ptarmigan harvest levels are not expected to change over the next five years.

Coyote harvest information is unavailable. Coyote numbers, which in the past have been relatively high on the post, now appear to be decreasing. Studies on these and other furbearing animals are needed to more accurately understand population sizes and dynamics. Coyote hunting is open on the

post with a season limit of 1. Open season is in accordance with ADF&G hunting regulations. Hunting is restricted to shotguns. Immediate closures may occur at the discretion of USARAK biologists (USARAK Reg. 190-13).

Potential Hunting and Fishing: Moose hunting and recreational lake fishing are the most popular activities in terms of user demand. Both have growth potential, but whether or not growth occurs will depend on species population dynamics more than any other factor. Recreational fishing may increase if proposed projects are completed and the current stocking rate is maintained or increased. Knowing the full potential for hunting and fishing requires a knowledge of factors such as biological potential of the land to produce game, degree of recreational quality desired, effects of the military mission on natural resources and associated recreation, and various sociological factors that influence hunter and angler activities.

The number of moose to be harvested on post during the fall and winter hunting season is determined by the results of the annual moose survey. When the moose population increases above or decreases below target numbers set through management goals, the number of hunting permits for moose will be adjusted accordingly. Consideration also must be given to how the moose population may impact Anchorage businesses and residences during the winter when habitat may be limited.

Potential for increased grouse, hare, and ptarmigan hunting is minimal. These species experience fluctuations in populations, and under current bag limits and seasons, hunter demand is being met.



Otter Lake campground.



Fort Richardson has many excellent hiking trails.

Although demand for increased coyote hunting exists due to the large number of hunters living in nearby urban areas, the coyote population appears to have been greatly reduced in the last five years due to increased wolf activity on post. Hunting of coyotes will be based on population status as determined by the Natural Resources Branch. Opportunities for hunting other furbearers are not feasible due to safety concerns and limited resources.

Currently, waterfowl hunting on Fort Richardson is confined to areas north of the Eagle River. Lakes in these areas also are used heavily for fishing and other recreation.

There is some growth potential for Fort Richardson's fishing program, but it is dependent almost entirely on the availability of fish from the hatchery and expansion of the stocking program. Increased stockings of Dishno Pond, Waldon Lake, and Thompson Lake hold the most potential for increased fishing use on the post.

Currently, Clunie, Gwen, and Otter lakes receive most of the management effort as well as most of the recreational use. This is due primarily to the ease of access to these lakes.

Improving access and maintenance, and upgrading facilities at some of the post's lakes could provide potential growth opportunities for the fishing program. The Clunie Lake area could be improved by graveling the parking area, providing sanitation facilities, and installing barriers to keep vehicles out of wetlands. In addition, the area has great poten-

tial for developing camping facilities. Waldon Lake has a good parking area, but adjacent natural areas are being degraded by uncontrolled, unauthorized uses such as camping. A boardwalk or portable pier for anglers could be installed to enhance fishing opportunities. Thompson Lake mainly requires the installation of barriers around common parking areas to stop damage to wetlands by vehicles. The road to Dishno Pond should be blocked to all traffic, as the area is very wet. The hiking trail to this pond needs improvement to allow better access. Improvements to Gwen Lake should concentrate on shore rehabilitation as the area has extensive damage from both beaver activity and human foot traffic. Development of a trail and possibly boardwalks in the marsh and wetland areas could greatly improve angler access to this area.

Of concern is the practice of driving vehicles onto frozen lakes, generally for ice fishing. This can lead to loss of vehicles and is a significant human safety hazard. It also poses a potential pollution risk (oil spills, etc.). It is for these reasons that driving privately-owned vehicles onto frozen lakes is prohibited.

Trapping: Over the years, Fort Richardson's trapping program has been plagued with numerous problems. Among these are:

- Individuals tampering with traps not belonging to them.
- Individuals accidentally stepping into traps.
- Trappers failing to pull traps prior to military exercises, as required, forcing LEC military game wardens to remove traps.
- Threatened lawsuits from people whose pets were accidentally caught or injured in traps.
- Needless destruction of non-target species (such as lynx and otter) caught in traps.
- Reports of people almost getting their hands caught in traps.

In addition to these safety, liability, and mission-related problems, the program has proven to be unjustifiably burdensome and time-consuming to both administer and enforce. This, coupled with the fact that these resources on Fort Richardson are very limited, has warranted the elimination of this

program in favor of directing management efforts and energy toward programs that have been proven more successful on Fort Richardson, such as hunting and fishing.

Hunter and Angler Administrative Processes: Military installations usually have complex hunter and angler control systems. These are needed to accommodate recreational activities without interference to the military mission and to ensure safe recreational experiences.

The ADF&G issues various regulations (trapping, migratory bird hunting, sport fish, and hunting) for hunters, anglers, and trappers in Alaska. AR 200-3, Natural Resources – *Land Forest and Wildlife Management*, and USARAK Regulation 200-3, *Enforcement of Hunting, Trapping and Fishing on Army Lands in Alaska*, are the primary means of establishing controls on hunting, trapping, and fishing as well as other natural resources-related activities on Fort Richardson. USARAK Reg 200-3 is the regulation pertaining to hunting, trapping, and fishing. Appendix D of the regulation provides information relating to the use of weapons, closed areas, and hunting, fishing, and trapping regulations specific to Fort Richardson. The Fort Richardson recreation supplement, updated annually, condenses these regulations and is handed out to the public.

In order to participate in hunting or fishing on Fort Richardson, individuals must obtain a post permit. Permits are issued at the Fish and Wildlife Museum to holders of valid state licenses. Permits are presently free of charge and good for one year.

Almost all military installations issue permits for hunting, fishing, and trapping, but most are charging a fee for those permits. Army funding policies are making it almost impossible to fund hunting and fishing programs unless a fee system is installed. Funds collected are available for fish and wildlife projects on the installation where they were collected. At Fort Richardson, the establishment of a system to collect the money will be put in place during 2002-2006.

Outdoor Recreation will sell permits at outlets already handling money. This has the advantage of already established outlets and financial accounting

systems as well as a desire on the part of Outdoor Recreation to undertake the mission. Only 10 percent of permit funds received go to Outdoor Recreation by regulation, and this may not cover costs, a critical element for this organization. Therefore, an additional recreation fee might have to be established, making the cost of permits higher.

Recently Chugach State Park, which shares much of its western border with Fort Richardson, instituted a user fee of \$5 per vehicle to cover its operating expenses. This is a precedent in this state and reflects the ever increasing need to acquire additional sources of funding. Population growth results in heavier use; current funding sources are unable to keep pace with the rising costs of maintaining these areas. Fort Richardson is experiencing a similar situation.

USARAK Regulation 200-3 outlines specific requirements of hunters with regard to check-in/out policies. Hunters are required to register daily at the main gate. They are then permitted to sign into any two hunting areas open for that day. Range Control provides the MP desk daily information regarding open and closed areas. At the end of each day, hunters are required to sign out in person. At this time, hunters are required to report their daily harvest on a daily hunter harvest record. Anglers not stationed or employed on the installation or Elmendorf AFB are required to stop at the main gate and obtain a visitor's pass. All other personnel entering the training areas are encouraged to contact the MP desk to obtain area closure information.

Persons are responsible for obtaining state hunting or fishing licenses before receiving post permits from the MP office. The MP office does not sell state licenses.

Fort Richardson maps are essential for hunter and angler use in the post's training areas. These maps, found in USARAK Regulation 200-3, identify closed areas, special hunting areas, fishable lakes and waterways.

The Military Fish and Wildlife Office, at the wildlife museum, gives each person who obtains a post hunting or fishing permit a Fort Richardson Safety Briefing. Several specialized briefings for the fall and winter archery/black powder moose hunts are

cooperatively presented by USARAK Natural Resources Branch and the military game wardens. Attendance at one of these briefings is mandatory for all hunters who have drawn a moose permit, as well as any companions who will accompany them on the hunt.

Off-Road Vehicles: ORVs on Fort Richardson include snowmachines, dirt bikes, four-wheelers, and four-wheel-drive vehicles. The use of three-wheeled ORVs is not allowed anywhere on Fort Richardson. ORVs are primarily used to access hunting and fishing areas, and for recreational riding.

ORVs have great potential for damage to natural resources. Army policy on ORVs is very restrictive (AR 200-3). USARAK Regulation 190-13 addresses areas open and closed to ORV use on Fort Richardson. Use of privately-owned ORVs on Fort Richardson is allowed on a limited basis. Vehicles that are used commonly as ORVs on post must remain on designated trails and roads, and permits are required. About 400 permits were issued by the MPs in 1994. Problems concerning ORVs are addressed in Section 16-4b of this plan.

Legal and illegal ORV use on Fort Richardson is high throughout the summer months. The most common ORVs using the post in summer include four-wheel drive vehicles, three and four wheelers, and dirt bikes. Snowmachines are the dominant ORV using the post during the winter months when the snowpack is adequate. ORV use on Fort Richardson is authorized only on established trails north of the Davis Highway between Poleline Road on the east and Otter Lake Road on the west. A prepared trail for motorcycles and three and four wheelers has been established in an abandoned material site near Bryant Army Airfield and the Glenn Highway. ORVs operating in summer must stay on established roads.

Opening and closing dates of Fort Richardson's ORV seasons will be set in conjunction with Chugach State Park.

USARAK will maintain opportunities for ORV use, provided it does not conflict with the military mission or adversely affect the environment. USARAK will re-evaluate the current ORV plan



Rafting is popular on Eagle River.

for adequacy in protecting resource and training values. The plan will be updated to address trespass ORV use in unauthorized areas. It will investigate a future ORV-user fee program to supplement costs for land rehabilitation and institutional controls.

Other Recreational Activities: USARAK strives to maintain an interactive relationship with local communities by providing many recreational opportunities to the public. Other recreational activities include picnicking, camping, hiking, cross-country skiing, snowshoeing, dog mushing, boating, rafting, and berry picking.

Aside from hunting and fishing, Fort Richardson offers a wide array of natural resources-related recreational activities. They range from passive activities, such as watching wildlife and picnicking, to very active recreational outlets such as hiking, rafting, camping, skiing, and ORV riding.

Picnicking and Camping: Day use and picnicking are authorized at Cottonwood Park, and the fishing lakes on post including Otter, Gwen, Thompson, Waldon, and Clunie lakes. Visitors are required to obtain a pass at the main gate to enter Fort Richardson.

Overnight vehicle camping is authorized only at established camping areas for up to seven days. The three areas on post authorized for overnight camping with recreational vehicles are Black Spruce Travel Camp, Upper Otter Lake and Clunie Lake. Black Spruce Travel Camp is Fort Richardson's full service overnight camping facility. Parking areas accommodate any size vehicle and motorhome.



Fort Richardson has over 50 miles of cross-country ski trails.

Tent pads, water, sewer, electrical hookups, bath and laundry facilities also are available. Reservations are made through Outdoor Recreation by telephone or by contacting the camp manager on-site. Fees are charged for Black Spruce.

Upper Otter Lake campground can accommodate cars and truck campers. Tent pads, water, and toilet facilities are available. There are no electrical or sewer hookups. A small fee is required to camp at Upper Otter Lake. Contact the boat rental facility at Otter Lake for reservations.

Clunie Lake is the post's most remote and undeveloped camping area. Overnight camping is authorized within the camping area near the middle of the west shore of Clunie Lake. The only facilities are portable toilets and garbage receptacles. Currently, there is no charge for camping at Clunie Lake. Contact the Otter Lake boat rental facility for reservations.

Open fires for recreational purposes are prohibited in all areas of Fort Richardson. Fires are permitted in portable stoves and grills, or in permanently established grills and/or fireplaces. All fires must be attended and completely extinguished upon de-

parture from the site. The cutting of firewood and stripping of birch bark for any purposes is prohibited.

Trails: The asphalt recreational trail along the west side of the Glenn Highway on Fort Richardson is the most popular non-motorized route on post. It receives continuous use from walkers, bikers, joggers, and roller bladers in summer and cross country skiers in winter. Currently, the trail is being connected to the Anchorage trail system with a three mile link from Boniface Parkway and the Glenn Highway along Ship Creek to downtown Anchorage. The trail already continues north from Fort Richardson to Birchwood, a one-way distance of about 15 miles. Residents of Eagle River also have access to the trail.

The post has over 50 miles of cross-country ski trails. These are used primarily for military training, but also are available for recreational use. Six of the most popular are the Red, Green, Blue, Yellow, Recreational, and Biathlon Ski Trails. Other trails that provide access to the Chugach State Park cross portions of the post as well. These trails are used primarily by hikers and mountain bikers. An important and heavily used access trail to the Ship Creek drainage in the Chugach State Park originates on Fort Richardson below Site Summit. A two-mile trail also exists to provide access to a remote cabin in the Chugach Mountains.

Over the years, Fort Richardson has received many requests for snowmachine routes through the post that would connect Anchorage with urban areas to the north at Eagle River, Chugiak, and Birchwood. These requests have come from military and civilian snowmachine clubs in the Anchorage area. USARAK has consistently denied these requests as the proposed routes pose significant safety, security, environmental, and liability problems in addition to being incompatible with the military mission. In the past, illegal snowmachine activities have resulted in serious vandalism and damage to a number of areas on post including Moose Run Golf Course. The majority of ongoing trespass occurring south of Glenn Highway is from snowmachines and ORVs. Current policy dictates that there will be no expansion of ORV trails (to include snowmachines) on Fort Richardson beyond those presently

authorized. Section 1-3 and Appendix 1-3 discuss concerns and policies of USARAK toward nonmilitary land uses. USARAK accommodates military and public snowmachine use in an open area on North Post. Further accommodation is not practical or feasible. The Army will maintain the status quo and will not establish snowmachine routes on Fort Richardson beyond those already designated.

Boating and Rafting: Recreational boating on post lakes, particularly Otter Lake, is popular. Eagle River is heavily used during the summer months by rafters, canoers, and kayakers. The Army issued 532 river use permits in 1996. In 1997, 622 permits were issued. Many boaters make multiple trips down lower Eagle River, some as many as a dozen trips, during the summer.

Lower Eagle River, which passes through Fort Richardson, is rated as Class II whitewater (Embrick 1994). At high water, some reaches of the river may be low Class III. The Army prepared environmental documentation and held public meetings on the recreational boating use of Eagle River in 1995. The need for an improved permitting policy and a new boat take-out area were identified. The Army constructed a boat take-out in May 1995, which included a gravel access road and parking area, signs, picnic table, portable toilet, and a large dumpster for trash disposal. An improved permitting process was initiated in 1996. Applications for permits are obtained by mail from the Public Affairs Office or in person from the Military Police at the wildlife museum, Mondays through Fridays, during normal working hours. Permits to boat Eagle River are issued at no cost.

The canyon portion of Ship Creek where it exits the Chugach Mountains is located on Fort Richardson. This section of the creek is very difficult to boat and is rated as Class V during normal flow and V+ during high water (Embrick 1994). The river drops at a high rate in the canyon, which causes the current to be exceedingly swift. In addition, narrow channels strewn with boulders make these waters even more dangerous. Ship Creek is a major public water supply for both military installations (Fort Richardson and Elmendorf AFB) and the city of Anchorage. For these reasons, the portion of Ship

Creek upstream of the Fort Richardson Dam remains closed to all boating and rafting activities.

Other boating is authorized for anglers using lakes on post, including Otter, Gwen, Thompson, Waldon, and Clunie. Visitors who desire to boat on these lakes are required to obtain a visitor's pass to enter the installation at the main gate. A pass for each day's use is required. Only electric motors are authorized for use on Otter, Gwen, Thompson, and Waldon lakes. Outboard motors up to 6 horsepower may be used on Clunie Lake. Testing outboard motors on post lakes is prohibited. Boats of any design including canoes, kayaks, and rafts and any other flotation device are not authorized on Ship Creek, North Fork Campbell Creek, or any other stream on the reservation with the exception of Eagle River.

Commercial rafting is not permitted on the post. USARAK must have the option to close Eagle River to rafting with little notice, encumbrances, or threat of tort claim, and this stipulation is not compatible with commercial rafting.

Skiing: Downhill skiing is available at the Army's Arctic Valley Ski Area/Ski Bowl near Site Summit. The area has facilities for both military training activities and civilian recreational skiing. Downhill and cross-country skiing is also available on the Five Mile Trail and at the Dyea Ski Area. Other cross-country trails are discussed in the trails section.

There is some discussion regarding the installation of lights at a sledding hill. This would add a very attractive recreational feature to the post. Lights are needed due to limited daylight during winter months.

Site Summit: Site Summit rises to almost 4,000 feet above sea level along the eastern boundary of Fort Richardson. It has an all-weather, well-maintained gravel road to the summit, where a Nike Hercules Missile Battery was in operation from 1959 to 1979. The abandoned missile site is an important Cold War property that was nominated and listed on the National Register of Historic Places in July 1996. The Alaska Office of History and Archeology (1996) prepared a pamphlet describing Site Summit.



Site Summit has been placed on the National Register of Historic Places.

Site Summit is also an outstanding area for Anchorage residents and visitors to enjoy scenic views. Attractive features at Site Summit include the alpine setting on the western flanks of the Chugach Mountains, the panoramic view of the Cook Inlet Basin, the Talkeetna Mountains 60 miles to the north, a large segment of the Alaska Range – from Mount McKinley 250 miles south to Mount Iliamna, and the Kenai Mountains 25 miles to the south. In addition, Fort Richardson, Elmendorf AFB, and Anchorage lie at its feet, and prominent features of these urban areas can be seen from Site Summit.

The site has high potential as a national historic and recreation area. The State Historic Preservation Office along with the Alaska Division of Parks and Outdoor Recreation are developing a study plan to determine management responsibilities and options for the site.

In addition, use of the area by the public would be strictly enforced. Details, outlining procedures, provisions, and requirements for public use of Site Summit, would be incorporated in both the outdoor recreation management action plan and Range Regulation 350-2.

Other Recreational Activities: USARAK strives to maintain an interactive relationship with local communities by providing many recreational opportunities to the public. The post has been used for activities such as marathons, hiking, backpacking, dog mushing (40 permits in 1994), mountain and road cycling, camping, berry picking, golfing, scouting, dog trials, and Special Olympics.

There are three areas of the post where dog training clubs can train their dogs and hold field trials. These areas are Derby Pond, Kiowa Lake, and Thompson Lake. Dog trainers are not permitted to use live birds or live ammunition for training.

Pets must be under either voice or leash control in all areas, and must be leashed in developed recreation sites and waterfowl nesting areas.

Swimming in any lake, stream, creek or reservoir on Fort Richardson is prohibited.

Falconry can be conducted on Fort Richardson's lands in accordance with stipulations set forth by the Natural Resources Branch and the Fort Richardson Range Control Office.

Post rifle ranges are used by numerous law enforcement agencies. Public tours of the wildlife museum, fish hatchery, and other areas are offered. This type of open and cooperative interaction is essential to allowing diverse recreational pursuits on a continuing basis.

There is some interest in horseback riding on Fort Richardson. This will be addressed in the outdoor recreation management action plan being developed. Until this plan is completed, horseback riding is not permitted.

Recreational activities involving removal of minerals (including gold panning, dredging, and mining of any kind) and/or fossils from Army-controlled land is not authorized.

USARAK also maintains a recreation camp located in Seward. This recently renovated camp offers many outdoor recreation activities available for active duty military personnel.

Watchable Wildlife: The Watchable Wildlife program provides wildlife viewing opportunities for soldiers, civilians, Alaska residents, and visitors, as well as benefiting public relations for U.S. Army Alaska. Watchable Wildlife programs include wildlife viewing platforms, nature trails, interpretive signs, brochures, facilities, audio visual productions, public presentations, and cooperative publications with local, state, and federal agencies.

The recreational pursuit of wildlife watching is obviously dependent upon wildlife abundance and observability. Moose watching is very popular, par-

ticularly around the cantonment area. Bird watching is done throughout the post. Otter Lake has two waterfowl observation platforms and a nature trail for viewing opportunities. Watchable wildlife has become a very popular recreational pastime over the last few years. The State of Alaska has developed a watchable wildlife booklet that includes Fort Richardson. The Watchable Wildlife program is very important at Fort Richardson as it provides recreation and enhances environmental awareness among participants.

Recreation and Ecosystem Management: A basic tenet of ecosystem management is the “human values and use” component. Fort Richardson’s outdoor recreation program affects ecosystems in terms of both products (fish and game species, firewood) and disturbances associated with recreationists. USARAK is well aware of the overriding need to ensure these activities do not significantly impact overall ecosystem integrity. Activities such as game harvest, ORV use or horseback riding will be closely monitored for impacts on ecosystem integrity. Special consideration will be given to protection of critical areas (e.g., loon-nesting sites, highly erodable areas) from negative impacts due to outdoor recreation.

Proposed Management: Conduct outdoor recreation management on Fort Richardson as outlined in Table 6-5.

Other Management Alternatives Considered and Eliminated: There are other potential methods for conducting outdoor recreation management. No other options, however, would meet the needs of the military mission. The proposed management actions listed above carefully balance the needs of the military mission, recreation, and the ecosystem. Other actions would be too minimal or would be cost prohibitive.

6.2.5 Outdoor Recreation Program Responsibilities

The Environmental Resources Department has responsibility for:

- Management of game species and natural resources.
- Coordinated selection and designation of installation outdoor recreation areas.
- Coordination of the use of outdoor recreation areas and their maintenance.
- Prevention of environmental degradation using limitations or closures on the use of recreational areas, in coordination with the Directorate of Community Activities.

The Community Recreation Division is responsible for:

- The movement of persons, special events, and organizational elements of outdoor recreation.

Table 6-5. Outdoor Recreation Management.

OBJECTIVE	RESPONSIBLE FOR IMPLEMENTATION	PRIORITY	IMPLEMENTATION				
			2002	2003	2004	2005	2006
Implement new hunting trapping and fishing (HTF) process.	USARAK Natural Resources	Medium		x			
Implement call-in call-out system.	USARAK Natural Resources	Medium	x				
Manage hunting, trapping, and fishing.	USARAK Natural Resources	Medium	x	x	x	x	x
Prepare and update annual hunting, trapping, and fishing harvest report.	USARAK Natural Resources	Medium	x	x	x	x	x
Construct watchable wildlife platform at Clunie Lake.	USARAK Natural Resources	Medium		x			
Create watchable wildlife driving tour and brochure.	USARAK Natural Resources	Medium			x		

- Determining the need for various outdoor recreation activities (exclusive of those involving consumptive use of wildlife).
- Requesting the designation of recommended areas for outdoor recreation use.
- Administering the recreation aspects of approved programs.
- Issuing use permits to individuals and groups when their requests for recreation access meet policy requirements (and sending copies of such licenses to the Environmental Resources Department).

6.3 Conservation Enforcement

Many aspects of natural resources management require effective enforcement if they are to be successful. Such features as harvest controls, protection of sensitive areas, pollution prevention, hunting and fishing recreation, nongame protection, and others are dependent upon effective law enforcement.

6.3.1 Conservation Enforcement Goals

Conservation enforcement goals all contribute to one or more of the overall natural resources program goals of stewardship, military training support, compliance, quality of life, and integration. The conservation enforcement goals for Fort Richardson are:

- Provide professional enforcement of natural resources-related laws.
- Promote the interaction of conservation officers with the public.
- Enforce laws and regulations pertaining to implementation of the natural resources program at Fort Richardson.
- Provide high quality opportunities for hunting and fishing.
- Protect sensitive species and wetlands.
- Use enforcement personnel to enhance the overall natural resources program.

6.3.2 Conservation Enforcement Management Plan

Conservation enforcement program management and planning includes all the planning, budgeting, contract oversight, and organization necessary to implement the conservation enforcement program. One emphasis for this component of the conservation enforcement program is to prepare and update the conservation enforcement management action plan. The second emphasis of program planning and management is to prepare and update USARAK Regulation 200-3 and the hunting and fishing supplement.

Description and Justification: Prepare, update, and implement a conservation enforcement management action plan for Fort Richardson. The plan is jointly developed by the USARAK Natural Resources Branch and the Fort Richardson Provost Marshal to ensure a solid working relationship is forged between the two offices. This action plan outlines responsibilities, communication, duties, regulations, and provisions for carrying out natural resources wildlife enforcement. Protocols are developed to address communications, meetings, after-action reports, and chain-of-command concerns. Also prepare and update USARAK Regulation 200-3 and the hunting and fishing supplement. Completing and updating the conservation enforcement management action plan is required by Public Law 106-65 (Military Land Withdrawal Act) as mitigation for the land withdrawal LEIS, and by Public Law 86-797 (Sikes Act) every five years to implement the INRMP. Per Memorandum DAIM-ED-N, 21 March 1997, this component of the INRMP is a class 1 requirement.

Measures of Effectiveness:

- Complete, maintain, and update a conservation enforcement management action plan for Fort Richardson.
- Complete, maintain, and update USARAK Regulation 200-3 and the hunting and fishing supplement.

Management History: The first conservation enforcement management action plan for Fort Richardson was completed in 2001.

Table 6-6. Conservation Enforcement Management Action Plan.

OBJECTIVE	RESPONSIBLE FOR IMPLEMENTATION	PRIORITY	IMPLEMENTATION				
			2002	2003	2004	2005	2006
Prepare annual updates of the conservation enforcement management action plan.	USARAK Conservation	High	x	x	x	x	x
Prepare and update the conservation enforcement management action plan for the planning period of 2007-2011.	USARAK Conservation	High					x
Complete NEPA documentation for update.	USARAK Conservation	High					x

Current Management: Current management actions to update the conservation enforcement management action plan will cease in 2002. If this INRMP is not approved and funded, no new management action plan will be prepared, updated, or implemented. Policies already in place in the current management action plan will continue.

Proposed Management: Prepare and update the conservation enforcement management action plan as outlined in Table 6-6.

Other Management Alternatives Considered and Eliminated: There are no alternatives to maintaining a current conservation enforcement management action plan with updates at least every five years. NEPA documentation is also legally mandated.

6.3.3 Conservation Enforcement Surveillance

During the fall hunting season, USARAK personnel use flights to monitor any trespass within the impact areas, the Eagle River Flats, Davis Range, and other restricted areas on post.

6.3.4 Conservation Enforcement

Description and Justification: Conservation enforcement on Fort Richardson includes enforcement of all natural resource-related and environmental laws, enforcement of trespass, interaction with the public, and conservation officer training. Effective law enforcement is critical to natural resources conservation and the continuance of hunting, trapping, and fishing programs on a sustained basis. Trespass is often the first step to most illegal range activity and reducing illegal trespass could also reduce illegal range activity. Conducting con-

servation enforcement is required by Public Law 86-797 (Sikes Act) to implement the INRMP.

Measures of Effectiveness:

- Reduce the number of natural resource-related violations during 2002-2006.
- Increase public awareness of USARAK's commitment to conserving the environment during 2002-2006.
- Increase the coverage and frequency of conservation enforcement activities on Fort Richardson.
- Increase the number of contacts with the public during 2002-2006.

Management History: Fish and wildlife enforcement on Fort Richardson was the responsibility of the Fort Richardson Military Police until 1999. During 1999, a change in the Military Police unit structure removed all Fort Richardson MP game wardens from fish and wildlife enforcement duties. In 2000, Environmental Resources Department, through authority of the Sikes Act, implemented a contract to provide conservation enforcement. The contract law enforcement officers will report to the Provost Marshall, but are limited to conservation enforcement duties by the bounds of their contract.

Prior to 1999, MP game wardens made approximately 200 contacts with users in the field annually, most of whom were anglers. About thirty 1805 violation (external laws) notices were issued each year for violations of license requirements and bag limits. About ten 1408 violation (post regulations) notices were issued per year for infringements of post regulations. Trespassers generally had to be



caught three times before an 1805 was written and the violator was sent to the federal magistrate in Anchorage.

In the past, USARAK experimented with training natural resources management personnel to double as environmental and natural resources enforcement officers. Two natural resources personnel at Fort Richardson obtained the required training for enforcement officers (with the exception of weapons training). Following this training, the natural resources personnel recognized that they could not adequately perform both duties concurrently. It was concluded that enforcement is a full-time job. The two personnel trained for enforcement assignments went back to full-time work as natural resources managers.

Current Management: There are five components of the USARAK conservation enforcement program which include enforcing conservation laws, reducing theft and vandalism, interacting with the public, enforcing trespass, and conservation officer training.

Enforcement of laws primarily aimed at protecting wildlife and other natural resources is an integral part of the installation's natural resources management program. Game laws must be enforced in accordance with applicable state and federal laws and as approved by the Commander in this INRMP. Enforcement of natural resource laws and regulations will be in accordance with this plan and will be performed by natural resource law enforcement professionals and/or the Provost Marshal if practicable.

Conservation Law Enforcement: USARAK conservation officers are responsible for enforcing a number of laws and regulations relating to natural resources and environmental. The Sikes Act is the primary natural resource law requiring natural resource law enforcement. Fort Richardson is under two concurrent jurisdictions. Natural resources law enforcement on the post can be performed by officers with federal or state commissions.

The success of hunting and fishing as well as other outdoor recreation programs is highly dependent on adequate enforcement. It has been said that a regulation or policy that cannot be enforced is worse than no policy at all. Even though regulations and policies regarding natural resources on Fort Richardson are enforceable, they are not problem free. Most of the problems seem to begin with illegal access to the post.

Trespass Enforcement: Crossing the installation boundary or the internal boundary of an off-limits area without approval constitutes trespass. Lack of boundary markers contributes to this problem. Little of the installation boundary is fenced or marked with signs. Much of the trespassing that occurs on Fort Richardson is intentional. Marking the boundary reduces accidental trespassing, but the effect on intentional trespass is minimal. Boundary marking can be effective only in concert with enforcement efforts associated with willful trespass. Fencing is better than boundary marking, but its effectiveness depends on intensive maintenance efforts. Fencing without a maintenance commitment is not cost effective. Since trespass is often the first step to more serious infractions, the overall reduction of illegal activities depends on a reduction in trespass.

Trespass is the most frequent infraction occurring on military installations, which is often the precursor to other illegal activities. Simply crossing the boundary without approval constitutes this action. Little of the post boundary is fenced or marked with signs. The post is slowly being fenced, project by project. Specific attention is focused on areas adjacent to subdivisions where trespass levels have been high. Signs have been used as markers, but most have been vandalized or stolen. In some cases, boulders have been used to block access, particularly in problem areas.

Trespass often is associated with off-road vehicle (ORV) activity. With the exception of snowmobiling or four-wheeling on established trails and in areas designated for their use, nonmilitary ORV activity is prohibited in most areas of the post.

Unauthorized ORV activity occurs to some degree along most of the post boundary, but is of particular concern in three major areas. The southwestern boundary south of Glenn Highway is probably violated most often. This area is slowly being fenced as part of a project to secure the boundary from Glenn Highway to the base of the mountains. This fencing project was partially funded by Anchorage Water and Waste Water Utilities in exchange for a right-of-way for a 48-inch water main. The balance will be funded by USARAK. The other two major problem areas along the post boundary are immediately west of the town of Eagle River and, a little further north, west of the towns of Birchwood and Chugiak. All three areas are close to urban communities, and Fort Richardson is a convenient place for ORV activities, with the risk of being apprehended relatively low.

ORV activity presents at least four potential problems for USARAK. The first is possible exposure to dangers associated with unexploded ordnance and ongoing shelling and firing. Generally, artillery and mortar firing are restricted to the ERF impact area, surrounded by a 300-meter buffer zone. This narrow buffer virtually ensures that unexploded ordnance is contained within impact area boundaries. Risk increases as people get closer to the actual impact area. The point can be made that ordnance is found outside the boundary, but this rationale does not reduce the significant increase in danger to trespassers within these boundaries. ORV trespass is particularly dangerous due to the places these vehicles can go and their weight, making them vulnerable to unexploded ordnance just beneath the surface.

The second problem associated with illegal ORV use is interference with ongoing military activities. The presence of unauthorized ORVs can disrupt military training to varying degrees depending upon the location and type of exercise being conducted. In some cases, it disrupts hundreds of troops in the field, and on small arms ranges, it can

be just as dangerous as accessing an impact area. The illegal ORV operator has no idea if, when, or where these ranges are being used.

The third and most critical factor to natural resources management and protection is damage caused to soils and vegetation. This may seem insignificant compared to the more obvious damage done by military maneuvers, but effects are cumulative. ORVs of all kinds seem to make use of places that are relatively unaffected by military vehicles. The damage they cause to wet, boggy areas and more rugged, steep terrain can be significant. These areas, particularly the subalpine and alpine areas, are very important to the overall ecology of Alaska.

Finally, unauthorized use of ORVs on Fort Richardson often leads to other illegal activities (including theft, vandalism, poaching and other fish and wildlife violations, etc.).

Theft and Vandalism: Theft of military ordnance (both unexploded and debris) and other items is an important issue with the Federal Bureau of Investigation and other enforcement agencies. These agencies work with military installations where this is a serious problem. People who enter Fort Richardson and other installations to steal military ordnance and other items are called “scrappers.” This issue is not thought to be as serious at Fort Richardson as it is at some other installations in the nation.

A connection exists between theft and natural resources management. Besides the obvious direct damage caused to the ecosystem discussed in the ORV section above, an atmosphere is created in which protection of natural resources becomes very difficult as fences are torn down, markers and equipment stolen, etc. The most common item stolen from Fort Richardson is probably firewood.

Fort Richardson has a few cultural resources of moderate historic value. Primary among these are homesteader cabins that are easily located and relatively open to irreparable damage and theft.

Cultural artifacts have value both for personal enjoyment and commercial sale. Protection of cultural resources is directly related to the control of trespassers. When cultural resources are discovered, it is often important to place the general area off-

limits to military training and public recreational use. Care should be taken to control accessibility of marked maps as cultural resources can be easily targeted for theft.

The Nike Hercules Missile Battery at Site Summit was officially nominated and listed on the National Register of Historic Places by the National Park Service, Washington, D.C., on July 11, 1996. Vandalism in the buildings on Site Summit has been a problem since 1979 when security patrols were abandoned. Access to Arctic Valley is via Ski Bowl Road, an all-weather road that is within an hour's drive of Anchorage. From the parking lot at Alpen Glo Ski Lodge, visitors can hike up the mountain to the Battery Command and Control Area and the Nike Missile launching pads in less than an hour. Over the years, individuals have torn off plywood covering doors and windows to gain entry. The Military Police seldom patrol the area. It will become necessary to provide better security for the missile site in the future and to increase Military Police patrols in the area. Gates on the fences around the missile launching pads should be kept closed and locked.

Interaction with the Public: In many cases, conservation officers are the primary contact between USARAK natural resources management and the public. This is a very important role for the conservation officers to play, because they represent not only the conservation program but also all of USARAK. These contacts are an excellent opportunity for USARAK to accomplish public outreach, awareness, and education.

Conservation Officer Training: AR 200-3 and the Sikes Act require effective natural resources law enforcement on military installations. There are requirements that this enforcement be closely coordinated with the natural resources organization and that enforcement be accomplished by professionally trained (game warden) personnel. A generally recognized requirement exists for a 40-hour-minimum annual refresher training for enforcement officers. Less training than this opens the employer to liability risks in the event of legally debatable officer actions.

The Alaska State Troopers provide training for Military Police (MP) game wardens. Wardens



Trespass often fosters more serious infractions such as vandalism and theft.

must qualify with assigned weapons regularly. The National Military Fish and Wildlife Association offers annual training for experienced wardens. This one-week training uses highly qualified instructors, many of whom have national reputations. The course is open to all DOD and is held on various military installations. This is the most commonly used course by military installations for refresher training.

Proposed Management: Conduct conservation enforcement management as outlined in Table 6-7.

Other Management Alternatives Considered and Eliminated: There are other potential methods for conducting conservation enforcement management. No other options, however, would meet the needs of the military mission. The proposed management actions listed above carefully balance the needs of the military mission, recreation, and the ecosystem. Other actions would be too minimal or would be cost prohibitive.

6.3.5 Conservation Enforcement Responsibilities

The Commander, Arctic Law Enforcement Command Provost Marshal, is the USARAK game warden. The Commander is responsible for coordination and supervision of fish and wildlife law enforcement on all Army lands in Alaska. The Provost Marshal at Fort Richardson appoints Military Police personnel to serve as game wardens. This system of fish and wildlife enforcement has been in place since establishment of the installation. The Provost Marshal supervises wildlife enforcement

Table 6-7. Conservation Enforcement Management.

OBJECTIVE	RESPONSIBLE FOR IMPLEMENTATION	PRIORITY	IMPLEMENTATION				
			2002	2003	2004	2005	2006
Conduct enforcement of natural resources laws.	USARAK Natural Resources	High	x	x	x	x	x
Conduct trespass enforcement.	USARAK Natural Resources	High	x	x	x	x	x
Conduct conservation enforcement training.	USARAK Natural Resources	High	x	x	x	x	x
Promote interaction of conservation officers with the public.	USARAK Natural Resources	High	x	x	x	x	x

officers. They also coordinate and receive technical direction from the Chief of Natural Resources in accordance with Army Regulation 200-3.

Fort Richardson's fish and wildlife enforcement has concurrent jurisdiction. It can be performed by officers with federal or state commissions. Enforcement is a joint responsibility of USARAK, USFWS, and the Alaska Department of Public Safety (State Troopers). Citations written by USARAK personnel are adjudicated by the Federal Magistrate, whereas citations issued by Alaska State Troopers go through the state system for adjudication.

Military Police game wardens on Fort Richardson also have responsibilities directly tied to outdoor recreation; specifically the issuance of hunting, trapping, and fishing permits. DPW, MWR, LEC, BLM, USFWS, ADF&G all have responsibilities here.



Military game wardens assist natural resources personnel in a variety of wildlife and natural resource matters.

6.4 Cultural Resources Management

The cultural resources program is described in the USARAK Integrated Cultural Resources Management Plan (ICRMP). The purpose of covering cultural resources in this INRMP is to ensure there is integration between cultural and natural resources management. Therefore, the cultural resources management plan, cultural resource surveys, and cultural resources protection and compliance are discussed below.

Cultural resources protection programs at Fort Richardson are conducted in accordance with the National Historic Preservation Act (NHPA) (16 U.S.C. Section 470, as amended), the Archeological Resources Protection Act (16 U.S.C. Section 470aa-47011), the American Indian Religious Freedom Act (42 U.S.C.), the Native American Graves Protection and Repatriation Act (NAG-PRA) (25 U.S.C. Section 3001 *et seq.*), DOD Directive 4710.1 (*Archeological and Historic Resources Management*, 1984), and AR 200-4 (*Cultural Resources Management*, draft). BLM also has responsibility for cultural resources compliance on withdrawal lands on Fort Richardson. The cultural resources program is composed of three primary components: program planning and management, inventory and monitoring, and management implementation. These components are explained in greater detail below.

6.4.1 Cultural Resources Program Goals

The goals for cultural resources management at Fort Richardson are:

- Protect cultural and historic resources on Fort Richardson.
- Ensure USARAK's natural resources program complies with the National Historic Preservation Act (NHPA).

6.4.2 Cultural Resources Planning

Cultural resources program management and planning includes all the planning, budgeting, contract oversight, and organization necessary to implement the cultural resources program. The primary emphasis for this component of the cultural resources program is the preparation and update of the ICRMP every five years. This Integrated Natu-

ral Resources Management Plan does not attempt to serve as the cultural resources management plan. A cultural resources management plan has been developed under a separate cover. The plan is required by the National Historical Preservation Act (NHPA) for all of Fort Richardson for the land withdrawal EIS. The *Fort Richardson Resource Management Plan* (BLM and U.S. Army 1994) also directs that the BLM and Army, in consultation with SHPO, develop an ICRMP.

In 1986, the 6th Infantry Division (Light) completed a Historic Preservation Plan (HPP) for U.S. Army lands in Alaska, including Fort Richardson (Bacon et al. 1986). This plan included a draft *Programmatic Memorandum of Agreement-Historic Preservation on Lands Administered by the U.S. Army in the State of Alaska*. The programmatic agreement has never been signed by the State Historic Preservation Office (SHPO).

6.4.3 Cultural Resources Inventory and Monitoring

Section 110, NHPA requires cultural resource surveys. These surveys are required to be conducted on all of Fort Richardson lands. These surveys have been conducted opportunistically in the past, concentrating on areas where disturbance from the military mission is likely. These surveys are not complete on Fort Richardson.

Much of Fort Richardson has not been surveyed for cultural and historic resources. Generally, surveys have been site specific (e.g., Glenn Highway, Malemute Drop Zone, Snowhawk Lake, and Otter Lake) with the exception of Steele (1980) who conducted a low intensity archaeological survey of the entire post.

Another effort that will help prioritize the lands that need to be surveyed is the development of a predictive model for archaeological resources. USARAK is continuing to update and refine the predictive model for Fort Richardson. The predictive model will eventually be the centerpiece of a programmatic agreement with the SHPO to deal with the potential impacts of military training and natural resource management on cultural resources.



The abandoned Nike Hercules missile battery on Site Summit is an important Cold War historic property.

6.4.4 Cultural Resources Management

Section 106, NHPA Compliance: Natural resources projects sometimes are overlooked as potential causes of adverse impacts to archeological sites. USARAK will address cultural resources program requirements, as well as meet goals of natural resources programs. Natural and cultural resources managers at Fort Richardson will work closely with one another during development of natural resources projects. Through this partnership, Fort Richardson will provide both natural and cultural resources for future generations to enjoy.

Activities such as vegetation clearing, timber removal, firebreak construction, and training land rehabilitation are potentially damaging to cultural resources. AR 200-4 and the laws upon which it is predicated require that such undertakings be accomplished in a manner consistent with the protection of cultural resources.

Natural resources projects with ground-disturbing activities will be processed through the Fort Richardson cultural resources manager to prevent activities from impacting cultural resources. Furthermore, the cultural resources manager will be consulted during long-range policy planning, such as this INRMP.

Some land management undertakings will have no effect on historic properties at Fort Richardson. However, to meet this list of exclusions, projects must be evaluated by a professional who meets applicable standards in 36 CFR 61, Appendix A. Excluded projects are listed below.

- Maintenance work on existing features, such as roads, fire lanes, mowed areas, active disposal areas, and man-made ditches, waterways, and ponds, when no new ground disturbance is proposed.
- Outdoor recreational programs including hunting, fishing, and non-consumptive uses in accordance with Fort Richardson and Army regulations.

- The following natural resources management activities: timber harvests, tree plantings, planting and maintenance of wildlife food and shrub plots in previously disturbed areas, prescribed burning of rangeland, and the improvement of existing stream crossings.
- Planting, cultivation, and harvest of existing crops not exceeding the depth of existing activities.
- Removal and replacement, in kind, of plant materials when they pose an imminent hazard to people or structures.
- Ordnance disposal in accordance with prescribed Fort Richardson, Army, and Department of Defense regulations.

ERD will review proposed projects by consulting guidelines provided in implementing regulations for the National Historic Preservation Act (36 CFR 800) to determine their effect on cultural resource sites. Any project assessed as having an effect on a cultural resource site on Fort Richardson will be coordinated with Alaska SHPO.

Protect and Conserve Cultural Resources: There are cultural resources in the Fort Richardson training areas that require protection from military training and natural resource activities. Protection measures are primarily to control access to these sites, which is accomplished by depicting these areas as restricted on the environmental limitations map.

6.4.5 Cultural Resources Management Responsibilities

USARAK DPW is responsible for cultural resources management on Fort Richardson. BLM and USARAK are jointly responsible for conducting Section 110 surveys of archaeological resources in the training areas. USARAK is responsible for conducting Section 106, NHPA actions for undertakings that result from natural resources management and military training.